Mr. Jeff Loeffler
Waupaca Foundry, Inc.
PO Box 249
Waupaca, IN 54981

Re: 123-11479-00019
PSD Significant Source Modification to:
Part 70 permit No.: T123-8451-00019

Dear Mr. Loeffler:

Waupaca Foundry, Inc. was issued Part 70 operating permit T123-8451-00019 on February 4, 1998 for a ductile iron treatment facility. An application to modify the source was received on October 21, 1999. Pursuant to 326 IAC 2-7-10.5 the following emission units are approved for construction and operation at the source:

Two (2) ductile iron treatment stations, both identified as P35, each with a maximum production capacity of 40 tons per hour. Particulate matter emissions are controlled by two (2) baghouse systems identified as C15 and C35. The gases from both baghouses are then exhausted to Stack S15.

The following construction conditions are applicable to the proposed project:

General Construction Conditions

1. The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Management (OAM).

2. This approval to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

3. Effective Date of the Permit
Pursuant to IC 13-15-5-3, this approval becomes effective thirty-three (33) days after its issuance.

4. Pursuant to 40 CFR 52.21(r)(2) and 326 IAC 2-2-8(a)(1) (PSD Requirements: Source Obligation) this permit to construct shall expire if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is discontinued for a continuous period of eighteen (18) months or more.

5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.

6. Pursuant to 326 IAC 2-7-10.5(l) the emission units constructed under this approval shall not be placed into operation prior to revision of the source's Part 70 Operating Permit to incorporate the required operation conditions.

The proposed operating conditions applicable to these emission units are attached to this Source Modification approval. These proposed operating conditions shall be included in the Part 70 operating permit when it is issued.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter call (800) 451-6027, press 0 and ask for Nisha Sizemore or extension (2-8356), or dial (317) 232-8356.

Sincerely,

Paul Dubenetzky, Chief
Permits Branch
Office of Air Management

Attachments
nls
cc: File - Perry County
U.S. EPA, Region V
Perry County Health Department
Air Compliance Section Inspector - Scott Anslinger
Compliance Data Section - Karen Nowak
Administrative and Development - Janet Mobley
Technical Support and Modeling - Michele Boner

PART 70 PSD SIGNIFICANT SOURCE MODIFICATION
OFFICE OF AIR QUALITY

Waupaca Foundry, Inc.
9856 State Highway 66
Tell City, Indiana 47586

(herein known as the Permittee) is hereby authorized to construct and operate subject to the conditions contained herein, the emission units described in Section A (Source Summary) of this approval.

This approval is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17. This approval is also issued pursuant to the requirements of 326 IAC 2-2 and 40 CFR 52.21.

Source Modification No.: 123-11479-00019	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date:

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SECTION A SOURCE SUMMARY

This approval is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the emission units contained in conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this approval pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary grey and ductile iron foundry.

Responsible Official:	James R. Larson, Vice President
Source Address:	9856 State Highway 66, Tell City, Indiana 47586
Mailing Address:	P.O. Box 249, Waupaca, Wisconsin 54981
SIC Code:	3321
County Location:	Perry
County Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Permit Program Major Source under PSD Rules; Major Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

Historical Background

There are currently two (2) ductile iron treatment stations, each with a maximum design capacity of 40 tons per hour. Both stations are currently controlled by one single baghouse, which can only be used to control one station at a time. Therefore, with the current control system design, only one ductile iron treatment station can be operated at a time because only one station can be controlled at a time. The PSD permit for the ductile iron treatment operations limited the production rate of the ductile iron treatment process to 60 tons per hour for both stations combined.

This approval allows Waupaca Foundry to increase the allowable production rate from 60 tons per hour to 80 tons per hour for both ductile iron treatment stations combined. This approval also allows Waupaca Foundry to modify the ventilation system serving the existing ductile iron treatment operations, designated as Process P35. A new baghouse will be added such that each ductile iron treatment station will be controlled by a separate baghouse.

Modifications

This stationary source is approved to construct and operate the following emission units and pollution control devices:

Two (2) ductile iron treatment stations, both identified as P35, each with a maximum production capacity of 40 tons of ductile iron per hour. Particulate matter emissions from station 1 are controlled by one (1) existing baghouse system identified as C15. Particulate matter emissions from station 2 are controlled by a new baghouse system identified as C35. The gases from both baghouses are then exhausted to Stack S15.

A.3 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 permit by 326 IAC 2-7-2 (Applicability) because:

(a) It is a major source, as defined in 326 IAC 2-7-1(22);

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONSTRUCTION CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this approval shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, any applicable definitions found in IC 13-11, 326 IAC 1-2 and 326 IAC 2-7 shall prevail.

B.2 Effective Date of the Permit [IC13-15-5-3]

Pursuant to 40 CFR Parts 124.15, 124.19 and 124.20, the effective date of this permit will be thirty-three (33) days from its issuance.

B.3 Permit Expiration Date [326 IAC 2-2-8(a)(1)] [40 CFR 52.21(r)(2)]

Pursuant to 40 CFR 52.21(r)(2) and 326 IAC 2-2-8(a)(1) (PSD Requirements: Source Obligation) this permit to construct shall expire if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is discontinued for a continuous period of eighteen (18) months or more.

B.4 Significant Source Modification [326 IAC 2-7-10.5(h)]

This document shall also become the approval to operate pursuant to 326 IAC 2-7-10.5(h) when, prior to start of operation, the following requirements are met:

(a) The attached affidavit of construction shall be submitted to the Office of Air Quality (OAQ), Permit Administration & Development Section, verifying that the emission units were constructed as proposed in the application. The emissions units covered in the Significant Source Modification approval may begin operating on the date the affidavit of construction is postmarked or hand delivered to IDEM if constructed as proposed.

(b) If actual construction of the emissions units differs from the construction proposed in the application, the source may not begin operation until the source modification has been revised pursuant to 326 IAC 2-7-11 or 326 IAC 2-7-12 and an Operation Permit Validation Letter is issued.

(c) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.

(d) The Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.

However, in the event that the Title V application is being processed at the same time as this application, the following additional procedures shall be followed for obtaining the right to operate:

(1) If the Title V draft permit has not gone on public notice, then the change/addition covered by the Significant Source Modification will be included in the Title V draft.

(2) If the Title V permit has gone thru final EPA proposal and would be issued ahead of the Significant Source Modification, the Significant Source Modification will go thru a concurrent 45 day EPA review. Then the Significant Source Modification will be incorporated into the final Title V permit at the time of issuance.

(3) If the Title V permit has not gone thru final EPA review and would be issued after the Significant Source Modification is issued, then the Modification would be added to the proposed Title V permit, and the Title V permit will issued after EPA review.

B.5 Emergency Provisions [326 IAC 2-7-16]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-7-16.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or
Telephone Number: 317-233-5674 (ask for Compliance Section)
Facsimile Number: 317-233-5967

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) IDEM, OAQ, may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4-(c)(10) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ, by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.

(g) Operations may continue during an emergency only if the following conditions are met:

(1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

(2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:

(A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and

(B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value.

Any operation shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

SECTION C GENERAL OPERATION CONDITIONS

C.1 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

(a) Where specifically designated by this approval or required by an applicable requirement, any application form, report, or compliance certification submitted under this approval shall contain certification by a responsible official of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.

(c) A responsible official is defined at 326 IAC 2-7-1(34).

C.2 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

(a) If required by specific condition(s) in Section D of this approval, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this approval, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond the Permittee's control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that failure to implement the Preventive Maintenance Plan does not cause or contribute to a violation of any limitation on emissions or potential to emit.

(c) PMP's shall be submitted to IDEM, OAQ, upon request and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its Preventive Maintenance Plan whenever lack of proper maintenance causes or contributes to any violation.

(d) Records of preventive maintenance shall be retained for a period of at least five (5) years. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are

available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

C.3 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12]

(a) The Permittee must comply with the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this approval.

(b) Any application requesting an amendment or modification of this approval shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue, P.O. Box 6015
Indianapolis, Indiana 46206-6015

Any such application should be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

C.4 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in this approval:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.5 Operation of Equipment [326 IAC 2-7-6(6)]

Except as otherwise provided by statute, rule, or in this approval, all air pollution control equipment listed in this approval and used to comply with an applicable requirement shall be operated at all times that the emission unit vented to the control equipment is in operation.

C.6 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. The provisions of 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4(d), (e), and (f), and 326 IAC 1-7-5(d) are not federally enforceable.

Testing Requirements [326 IAC 2-7-6(1)]

C.7 Performance Testing [326 IAC 3-6][326 IAC 2-1.1-11]

(a) Compliance testing on new emission units shall be conducted within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this approval, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this approval, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

(b) All test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by the IDEM, OAQ, if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

The documentation submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]

C.8 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Unless otherwise specified in this permit, compliance with applicable requirements shall be documented as required by this approval. All monitoring and record keeping requirements not already legally required shall be implemented upon startup. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment.

C.9 Maintenance of Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

(a) In the event that a breakdown of the emission monitoring equipment occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem. To the extent practicable, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less frequent than required in Section D of this permit until such time as the monitoring equipment is back in operation. In the case of continuous monitoring, supplemental or intermittent monitoring of the parameter should be implemented at intervals no less often than once an hour until such time as the continuous monitor is back in operation.

(b) The Permittee shall install, calibrate, quality assure, maintain, and operate all necessary monitors and related equipment. In addition, prompt corrective action shall be initiated whenever indicated.

C.10 Pressure Gauge Specifications

Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent (±2%) of full scale reading.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

C.11 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6] [326 IAC 1-6]

(a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. The compliance monitoring plan can be either an entirely new document, consist in whole information contained in other documents, or consist of a combination of new information and information contained in other documents. If the compliance monitoring plan incorporates by reference information contained in other documents, the Permittee shall identify as part of the compliance monitoring plan the documents in which the information is found. The elements of the compliance monitoring plan are:

(1) This condition;

(2) The Compliance Determination Requirements in Section D of this permit;

(3) The Compliance Monitoring Requirements in Section D of this permit;

(4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and

(5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAQ upon request and shall be subject to review and approval by IDEM, OAQ. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of:

(A) Reasonable response steps that may be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and

(B) A time schedule for taking reasonable response steps including a schedule for devising additional response steps for situations that may not have been predicted.

(b) For each compliance monitoring condition of this permit, reasonable response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to take reasonable response steps shall constitute a violation of the permit.

(c) Upon investigation of a compliance monitoring excursion, the Permittee is excused from taking further response steps for any of the following reasons:

(1) A false reading occurs due to the malfunction of the monitoring equipment. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.

(2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;

(3) An automatic measurement was taken when the process was not operating; or

(4) The process has already returned or is returning to operating within "normal" parameters and no response steps are required.

(d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

(e) All monitoring required in Section D shall be performed at all times the equipment is operating. If monitoring is required by Section D and the equipment is not operating, then the Permittee may record the fact that the equipment is not operating or perform the required monitoring.

(f) At its discretion, IDEM may excuse the Permittee's failure to perform the monitoring and record keeping as required by Section D, if the Permittee provides adequate justification and documents that such failures do not exceed five percent (5%) of the operating time in any quarter. Temporary, unscheduled unavailability of qualified staff shall be considered a valid reason for failure to perform the monitoring or record keeping requirements in Section D.

C.12 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this approval exceed the level specified in any condition of this approval, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these corrective actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the response actions are being implemented. IDEM, OAQ shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAQ within thirty (30) days of receipt of the notice of deficiency. IDEM, OAQ reserves the authority to use enforcement activities to resolve noncompliant stack tests.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ

may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate approval conditions may be grounds for immediate revocation of the approval to operate the affected facility.

The documents submitted pursuant to this condition do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.13 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

(a) Records of all required data, reports, and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years and available upon the request of an IDEM, OAQ, representative. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a written request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of approval issuance.

C.14 General Reporting Requirements [326 IAC 2-7-5(3)(C)]

(a) The reports required by conditions in Section D of this approval shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue, P. O. Box 6015
Indianapolis, Indiana 46206-6015

(b) Unless otherwise specified in this approval, any notice, report, or other submission required by this approval shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(c) Unless otherwise specified in this approval, any quarterly report shall be submitted within thirty (30) days of the end of the reporting period. The report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(d) The first report shall cover the period commencing on the date of issuance of this approval and ending on the last day of the reporting period. Reporting periods are based on calendar years.

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)] (2)]
The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.

Two (2) ductile iron treatment stations, both identified as P35, each with a maximum production capacity of 40 tons of ductile iron per hour. Particulate matter emissions from station 1 are controlled by one (1) existing baghouse system identified as C15. Particulate matter emissions from station 2 are controlled by a new baghouse system identified as C35. The gases from both baghouses are then exhausted to Stack S15.

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 Prevention of Significant Deterioration (PSD) BACT PM/PM10 [326 IAC 2-2]

Pursuant to 326 IAC 2-2-3(a)(3) (Prevention of Significant Deterioration (PSD) Rules), the following conditions shall apply:

(a) The PM/PM10 emissions from the baghouse identified as C15 controlling the ductile iron treatment process P35 station #1 shall be limited to a combined total of 2.1 pounds per hour and 0.005 gr/dscf.

(b) The PM/PM10 emissions from the baghouse identified as C35 controlling the ductile iron treatment process P35 station #2 shall not exceed 2.6 pounds per hour and 0.005 gr/dscf.

(c) The maximum production rate of both ductile iron treatment stations combined shall not exceed 80 tons per hour. This requirement shall supersede Condition D.4.8 (e) of CP 123-8451-00019 issued on February 4, 1998.

D.1.2 Particulate Matter (PM) [326 IAC 6-3]

Pursuant to 326 IAC 6-3-2 (Process Operations), the particulate matter (PM) from each of the ductile iron treatment stations, collectively identified as P35 shall not exceed 42.5 pounds per hour when operating at a process weight rate of 40 tons of ductile iron per hour each. The pounds per hour limitations were calculated with the following equation:

Interpolation and extrapolation of the data for the process weight rate greater than or equal to 60,000 pounds per hour shall be accomplished by use of the equation:

$E = 55 P^{0.11} - 40$ where E = rate of emission in pounds per hour; and P = process weight rate in tons per hour

D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for each of the control devices listed in this section.

Compliance Determination Requirements

D.1.4 Particulate Matter Emission Controls [326 IAC 2-2]

(a) The baghouse C15 shall be in operation at all times when the ductile iron treatment station #1 is in operation.

(b) The baghouse C35 shall be in operation at all times when the ductile iron treatment station #2 is in operation.

D.1.5 Testing Requirements [326 IAC 2-7-6(1),(6)][326 IAC 2-1.1-11]

Within 120 days after issuance of this permit, the Permittee shall perform PM and PM10 testing on the baghouses C15 and C35 used to control the ductile iron treatment process P35 when both of the ductile iron treatment stations are in operation and operating at least 95% of the maximum capacity, in order to demonstrate compliance with Conditions D.1.1 and D.1.2. Testing shall be conducted using methods as approved by the Commissioner These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.1.6 Visible Emissions Notations

(a) Visible emission notations of each of the baghouses C15 and C35 stack exhausts shall be performed once per shift during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, “normal” means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting start-up or shut down times.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

D.1.7 Parametric Monitoring

The Permittee shall record the total static pressure drop across each of the baghouses C15 and C35 used in conjunction with the ductile iron treatment process P35, at least once per shift when the ductile iron treatment stations are in operation when venting to the atmosphere. Unless operated under conditions for which the Compliance Response Plan specifies otherwise, the pressure drop across each baghouse shall be maintained within the range of 3.0 - 10.0 inches of water or a range established during the latest stack test. The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when the pressure reading

is outside of the above mentioned range for any one reading. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

The instrument used for determining the pressure shall comply with Section C -Pressure Gauge and Other Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

D.1.8 Baghouse Inspections

An inspection shall be performed each calendar quarter of all bags controlling the shot blasting machines when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting indoors. All defective bags shall be replaced.

D.1.9 Broken or Failed Bag Detection

In the event that bag failure has been observed.

(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(b) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.10 Record Keeping Requirements

(a) In order to document compliance with Condition D.1.6, the Permittee shall maintain records of visible emission notations of the baghouse stack exhaust(s) once per shift.

(b) In order to document compliance with condition D.1.7, the Permittee shall maintain records of the following operational parameters once per shift during normal operation when venting to the atmosphere:

(1) Inlet and outlet differential static pressure; and

(2) Cleaning cycle operation.

(c) In order to document compliance with Condition D.1.8, the Permittee shall maintain records of the results of the inspections required under Condition D.1.8 and the dates the vents are redirected.

(d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

PART 70 SOURCE MODIFICATION CERTIFICATION

Source Name: Waupaca Foundry, Inc.
Source Address: 9856 State Highway 66, Tell City, Indiana 47586
Mailing Address: P.O. Box 249, Waupaca, Wisconsin 54981
Source Modification No.: SSM 123-11479-00019

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this approval.

Please check what document is being certified:

9 Test Result (specify) _____

9 Report (specify) _____

9 Notification (specify) _____

9 Affidavit (specify) _____

9 Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Date:

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the
Technical Support Document for a Significant Source Modification
to a Part 70 Operating Permit

Source Name:	Waupaca Foundry, Inc.
Source Location:	9856 State Highway 66, Tell City, IN 47586
County:	Perry
SIC Code:	3321
Operation Permit No.:	T123-9234-00019
Operation Permit Issuance Date:	not yet issued
Significant Source Modification No.:	123-11479-00019
Permit Reviewer:	Nisha Sizemore

On April 2, 2001, the Office of Air Quality (OAQ) had a notice published in The Perry County News, Tell City, Indiana, stating that Waupaca Foundry, Inc. had applied for a significant source modification to a Part 70 Operating Permit to make modifications to the existing Phase 2 ductile iron treatment operation with a baghouse for particulate matter control. The notice also stated that OAQ proposed to issue a permit for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On April 25, 2001, Steven Klafka, Wingra Engineering, on behalf of Waupaca Foundry, submitted comments on the proposed significant source modification to the Part 70 permit. A summary of the comments is as follows:

Section A

Comment #1

We suggest the permit and TSD make the following clarification:

"The two treatment stations are currently capable of producing 80 tons per hour while sharing a single baghouse. The modification of the ventilation system from 50,000 to 110,000 acfm and the addition of a new baghouse will provide more flexibility in the operation of the two treatment stations, and will eliminate the potential for uncontrolled emissions."

"While the existing PSD permit for the ductile iron treatment operations limits production to 60 tons per hour, the permit correspondence demonstrates that the approved capacity should have been 80 tons per hour and the 60 tons per hour limitation was a typographical error which is being corrected with this approval."

Response #1

The permit already specifies that one baghouse will control each station. IDEM disagrees that the 60 tons per hour limit in the previous PSD permit was a typographical error. The permit correspondence indicates that Waupaca Foundry stated that the maximum design capacity was 80 tons per hour, but the allowable emissions were only based on operating at 60 tons per hour. This is clear from the emission calculations Waupaca submitted, which use 60 tons per hour as the operating rate for the ductile iron treatment operations. Additionally, the permit was public noticed with the 60 ton per hour limit and Waupaca did not make any comment stating that the limit was in error. There have been no changes to the permit or TSD as a result of this comment.

Comment #2

We suggest the following addition to Condition D.1.5, which requires stack testing for stack S15:

"This condition does not preclude the testing of the combined stack S15 emissions to demonstrate compliance with the BACT limitation of 0.005 gr/acf and individual limitations for the P35 treatment stations."

Note: This issue has arisen whenever a new source combines its emissions with other sources. It is difficult to accurately test individual sources rather than combined air flows. We have successfully tested the concentration of the combined emissions to demonstrate compliance with the BACT limit (i.e. 0.005 gr/acf) and applied this concentration to the flow rate from each new source to demonstrate compliance with their hourly limitations. This procedure would be described in the test protocol.

Response #2

The BACT limitation on stack S15 is 0.005 grains per dry standard cubic foot of exhaust, not grains per actual cubic foot of exhaust. Additionally, IDEM believes it is not necessary to include a station indicating how stack testing will be performed. The stack test protocol will be review by IDEM's Compliance Data staff. Therefore, it is not necessary for the permit to include details of how testing will be performed.

Comment #3

In the TSD table titled "Potential to Emit" it is not clear if it was IDEM's intent to list the change in emissions from this project (i.e. 11.26 tpy), or the total emissions after the project (i.e. 20.6 tpy).

Response #3

The intent was to list the total increase in emissions from the new baghouse, which is 11.26 tons per year. There have been no changes to the permit as a result of this comment.

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Part 70 Significant Source Modification.

Source Background and Description

Source Name:	Waupaca Foundry, Inc.
Source Location:	9856 State Highway 66, Tell City, IN 47586
County:	Perry
SIC Code:	3321
Operation Permit No.:	T 123-9234-00019
Operation Permit Issuance Date:	not yet issued
Significant Source Modification No.:	123-11479-00019
Permit Reviewer:	Nisha Sizemore

The Office of Air Quality (OAQ) has reviewed a modification application from Waupaca Foundry, Inc. relating to the construction of the following emission units and pollution control devices:

Two (2) ductile iron treatment stations, both identified as P35, each with a maximum production capacity of 40 tons of ductile iron per hour. Particulate matter emissions from station 1 are controlled by one (1) existing baghouse system identified as C15. Particulate matter emissions from station 2 are controlled by a new baghouse system identified as C35. The gases from both baghouses are then exhausted to Stack S15.

History

There are currently two (2) ductile iron treatment stations, each with a maximum design capacity of 60 tons per hour. Both stations are currently controlled by one single baghouse, which can only be used to control one station at a time. The ductile iron treatment stations are currently permitted by PSD permit CP123-8451 issued on February 4, 1998. The PSD permit determined that the operation of the baghouse was BACT with a PM/PM10 emission limit of 0.005 gr/dscf. Therefore, with the current control system design, only one ductile iron treatment station can be operated at a time because only one station can be controlled at a time. The PSD permit for the ductile iron treatment operations limited the production rate of the ductile iron treatment process to 60 tons per hour for both stations combined.

On January 7, 1998, Waupaca Foundry, Inc. submitted an application to the OAQ requesting to modify the ventilation system serving the existing ductile iron treatment operations, designated as Process P35. A new baghouse will be added such that each ductile iron treatment station will be controlled by a separate baghouse. The allowable production rate for the facility will now be increased to 80 tons per hour, which is the maximum melt rate of the cupola. Since this modification consists of a relaxation of a limit that was established as part of a PSD BACT determination, it will be necessary to review the modification pursuant to the requirements of 326

IAC 2-2 (PSD), regardless of the amount of the increase in emissions.

Enforcement Issue

(a) IDEM is aware that these modifications have been constructed and operated prior to receipt of the proper permit.

(b) IDEM is reviewing this matter and will take appropriate action. This proposed permit is intended to satisfy the requirements of the construction permit rules.

Additionally, the source has the following enforcement action pending:

(a) A notice of violation (NOV) has been issued to the source for failure to install and operate a baghouse to control emissions from the cupola scrap and charge handling process.

(b) A notice of violation (NOV) has been issued to the source for opacity violations.

(c) A referral has been sent to the Office of Enforcement because the source failed some stack tests.

(d) A referral has been sent to the Office of Enforcement because the source made modifications to the existing ductile iron treatment stations prior to obtaining a PSD permit.

(e) Case number A-4538 for violation of operation conditions 9, 28, and 31 of permit CP123-4593, and for violation of operation conditions D.1.6, D.1.7, D.2.5, D.2.8, D.3.6, D.3.7, D.4.13, D.4.14, D.5.7, and D.5.8 of CP 123-8451.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (^{0}F)
S15	baghouse C15 controlling the ductile iron treatment station	180	16	780,000	100

Recommendation

The staff recommends to the Commissioner that the Part 70 Significant Source Modification be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on October 21, 1999.

Emission Calculations

See Appendix A of this document for detailed emissions calculations.

Potential To Emit of Modification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit. The combined maximum capacity of the two ductile iron treatment stations is 80 tons per hour, which is based on the maximum melt capacity of the Phase 2 cupola.

Pollutant	Potential To Emit (tons/year)
PM	1126.29
PM-10	1126.29
SO_2	0.00
VOC	0.00
CO	0.00
NO_x	0.00

Justification for Modification

The Part 70 Operating permit is being modified through a Part 70 PSD Significant Source Modification. This modification is being performed pursuant to 326 IAC 2-7-10.5(f)(1), which states that any modification subject to the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) requires a significant source modification.

County Attainment Status

The source is located in Perry County.

Pollutant	Status
PM-10	attainment
SO_2	attainment
NO_2	attainment
Ozone	attainment
CO	attainment
Lead	attainment

(a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC and NO_X emissions are considered when evaluating the rule applicability relating to the ozone standards. Perry County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

(b) Perry County has been classified as attainment or unclassifiable for all criteria pollutants.

Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.

Source Status

Existing Source PSD or Emission Offset Definition (emissions after controls, based upon 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	487
PM10	487
SO_2	208
VOC	587
CO	4869
NO_x	293
Pb	2.02
Be	0.0081
HAPs	266

(a) This existing source is a major stationary source because an attainment regulated pollutant is emitted at a rate of 100 tons per year or more, and it is one of the 28 listed source categories.

(b) These emissions are based upon the TSD for SSM123-12331, issued January 31, 2001.

Potential to Emit of Modification After Issuance

The table below summarizes the potential to emit, reflecting all limits, of the significant emission units after controls. The control equipment is considered federally enforceable only after issuance of this Part 70 source modification.

	Potential to Emit (tons/year)						
Process/facility	PM	PM-10	SO_2	VOC	CO	NO_X	HAPs
baghouse C35 controlling existing ductile iron treatment stations	11.26	11.26[1]	0.00	0.00	0.00	0.00	0.00

The PM and PM10 emissions are limited to 11.26 tons/yr, which is less than the PSD significance levels of 25 and 15 tons per year for PM and PM10 respectively. However the PSD requirements

[1] PM10 includes filterable and condensible PM10.

do apply because the allowable production rate for the two ductile iron treatment stations combined will now be increased from 60 tons per hour to 80 tons per hour, which is the maximum melt rate of the cupola. Since this modification consists of a relaxation of a limit that was established as part of a PSD BACT determination, it will be necessary to review the modification pursuant to the requirements of 326 IAC 2-2 (PSD), regardless of the amount of the emissions increase.

Federal Rule Applicability

(a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs)(326 IAC 14 and 40 CFR Part 63) applicable to this proposed modification.

State Rule Applicability - Entire Source

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100) tons per year of PM, PM10, SO2, VOC, and CO. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by July 1 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

326 IAC 5-1 (Opacity Limitations)

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

State Rule Applicability - Individual Facilities

326 IAC 2-2 (Prevention of Significant Deterioration)

This proposed modification is subject to the Prevention of Deterioration (PSD) rules for PM and PM_{10} because the ductile iron treatment facilities were subject to the PSD rules for these pollutants when they were originally permitted. Therefore, the PSD provisions require that this major modification be reviewed to ensure compliance with the National Ambient Air Quality Standards, the applicable PSD air quality increments, and the requirements to apply the best available control technology on the project's emissions.

The *Air Quality Analysis* report included in Appendix B was conducted to show that this major modification does not violate the National Ambient Air Quality Standards (NAAQS) and does not exceed the incremental consumption above 80 percent of the PSD increment for any pollutant.

The best available control technologies (BACT) for the facilities covered in this major modification are determined on a case-by-case basis by reviewing similar process controls and new available technologies. In addition, the cost per ton of pollutant removed, energy requirements, and environmental impacts are weighed in IDEM's final decision.

BACT for PM/PM10 Emissions
Two (2) methods to control the particulate emissions from the metal returns handling system were evaluated including a baghouse system and a water scrubber system. The baghouse system was chosen as BACT because it is more effective in controlling the particulate emissions. Since the source accepted the most effective control technology, a cost analysis was not necessary.

The following table shows recent BACT determinations for ductile iron treatment stations at iron foundries.

Source	Control Option	BACT Limit
Waupaca Foundry, Inc. Plant 6, Phase 2, Etowah, TN	baghouse	0.005 gr/dscf; 2.6 lbs/hr
Waupaca Foundry, Inc. Plant 5, Phase 2, Tell City, IN	baghouse	0.005 gr/dscf;
Waupaca Foundry, Inc. Plant 3, Waupaca, WI	baghouse	0.005 gr/dscf; 5.8 lbs/hr

The following limitations have been established for the ductile iron treatment stations:

Ductile Iron Treatment Station - The outlet grain loading of the new baghouse system C35 shall not exceed 0.005 grains per dry standard cubic feet (gr/dscf), which is consistent with similar BACT determinations recently conducted. There have been no other BACT determinations for similar facilities at grey iron foundries which required PM/PM10 emission limits less than 0.005 gr/dscf; therefore, this limit represents BACT for the new baghouse controlling the ductile iron treatment station. The combined maximum production rate of both of the Phase 2 ductile iron treatment stations shall not exceed 80 tons per hour. This limit will supersede Condition D.4.8(e) of CP123-8451-00019 issued February 4, 1998. The potential controlled emissions from both baghouses controlling both of the Phase II ductile iron treatment stations shall not exceed 4.7 pounds PM/PM10 per hour, 0.059 pounds per ton of ductile iron, and 20.6 tons of PM/PM10 per year. Compliance with this limit will also satisfy the requirements of 326 IAC 6-3-2 (Process Operations).

326 IAC 6-3-2 (Particulate Matter Emissions Limitations from Process Operations)

Pursuant to this rule, the PM emissions from the baghouse P35 controlling the ductile iron treatment station shall not exceed 42.5 pounds per hour when operating at a process weight rate of 40 tons per hour.

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour and P = process weight rate in tons per hour

The emission calculations are shown in Appendix A.

Compliance Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this modification are as follows:

The baghouses C15 and C35 controlling the modified ductile iron treatment process P35 has applicable compliance monitoring conditions as specified below:

(a) Visible emissions notations of the baghouses C15 and C35 shall be performed once per shift during normal daylight operations. A trained employee will record whether emissions are normal or abnormal. For processes operated continuously "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time. In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. The Preventive Maintenance Plan for this unit shall contain troubleshooting contingency and corrective actions for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(b) The Permittee shall record the total static pressure drop across the baghouses C15 and C35 controlling the ductile iron treatment stations, at least once per shift when the ductile iron treatment stations are in operation. Unless operated under conditions for which the Preventive Maintenance Plan specifies otherwise, the pressure drop across the baghouses shall be maintained within the range of 3.0 to 10.0 inches of water or a range established during the latest stack test. The Preventive Maintenance Plan for these units shall contain troubleshooting contingency and corrective actions for when the pressure reading is outside of the above mentioned range for any one reading. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(c) An inspection shall be performed each calender quarter of all bags controlling the ductile iron treatment process P35 when venting to the atmosphere. A baghouse inspection shall be performed within three months of redirecting vents to the atmosphere and every three months thereafter. Inspections are optional when venting to the indoors. All defective bags shall be replaced.

(d) In the event that bag failure has been observed.

(1) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if there are no visible emissions or if the event qualifies as an emergency and the Permittee satisfies the emergency provisions of this permit (Section B- Emergency Provisions). Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetable not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.

(2) For single compartment baghouses, failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

(e) Within 120 days after issuance of this permit, the Permittee shall perform stack tests for PM and PM10 emissions from S15 when all of the processes exhausting to this stack are in operation and operating at least 95% of the maximum capacity, using methods as approved by the Commissioner. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration.

These monitoring conditions are necessary in order to demonstrate compliance with 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) and 326 IAC 6-3-2 (Process Operations).

Conclusion

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Source Modification No. 123-11479-00019.

Appendix A: Emission Calculations

Company Name:	Waupaca Foundry, Inc.
Plant Location:	Tell City, Indiana
County:	Perry
Permit Reviewer:	Nisha Sizemore
Title V #:	123-11479
Plt. ID #:	123-00019

Baghouse C15 controlling the ductile iron treatment process P35, station #2

Controlled Emissions:

$$\frac{0.005 \text{ gr/acfm} \times 60000 \text{ acfm} \times 60 \text{ min/hr}}{7000 \text{ gr/lb}} = 2.57 \text{ lbs/hour} = 11.26 \text{ tons/yr}$$

Efficiency of Baghouse: 99.9%

$$\text{Potential Emissions} = \frac{\text{Controlled Emissions}}{(1 - \text{Efficiency (\%)})} = 2571 \text{ lbs/hr} = 11262.86 \text{ tons/yr}$$